

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
24 March 2005 (24.03.2005)

PCT

(10) International Publication Number
WO 2005/026845 A1

(51) International Patent Classification⁷: **G03G 9/125**,
C09D 11/10, 11/08, 11/12

(74) Agent: **MADDERN**s; Level 1, 64 Hindmarsh Square,
Adelaide, S.A. 5000 (AU).

(21) International Application Number:
PCT/AU2004/001241

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(22) International Filing Date:
14 September 2004 (14.09.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2003905081 18 September 2003 (18.09.2003) AU

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (*for all designated States except US*): **RE-SEARCH LABORATORIES OF AUSTRALIA PTY LTD** [AU/AU]; 210 Greenhill Road, Eastwood, S.A. 5063 (AU).

(72) Inventor; and

(75) Inventor/Applicant (*for US only*): **HERBERT, Marko, Lee** [AU/AU]; 62 Frederick Street, Maylands, S.A. 5069 (AU).

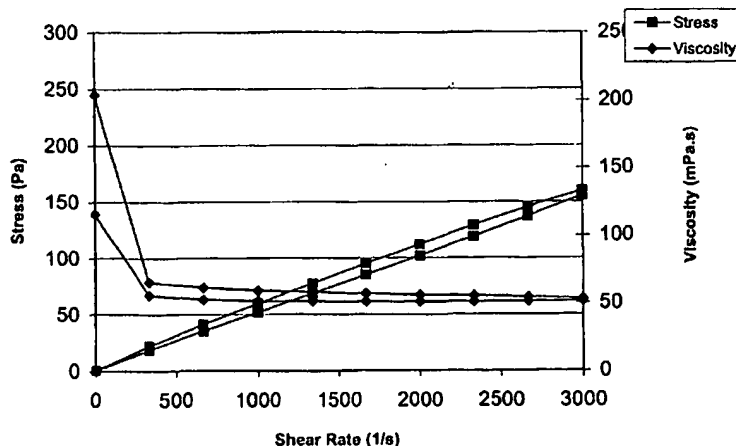
Published:

— with international search report

[Continued on next page]

(54) Title: MARKING LIQUID METHOD OF PREPARATION AND PRODUCT PRODUCED THEREBY

EXAMPLE 1 - CONVECTION TREATMENT



(57) Abstract: A method of preparation of a liquid electrostatographic toner or liquid ink jet ink which includes the steps of heating a marking particle mix of particles of a resin and a colourant blend in a carrier liquid to a temperature between about the first softening point of the resin and about the second softening point of the resin, maintaining the temperature of the heated marking particle mix for a selected period of time, cooling the marking particle mix to room temperature, and mixing the marking particle mix with high shear. The particle mix can be produced by coarse grinding in a ball mill. The resultant toner or ink has an improved Newtonian like flow behaviour, improved electrical properties, reduced sedimentation and agglomeration and significantly improved optical density and reduced background. The invention also includes toners and inks produced by the method.

WO 2005/026845 A1



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.